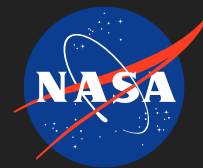


## ISS Leak Detection and Astrophysics with Lobster-Eye X-Ray Detector



Completed Technology Project (2010 - 2014)

## Project Introduction

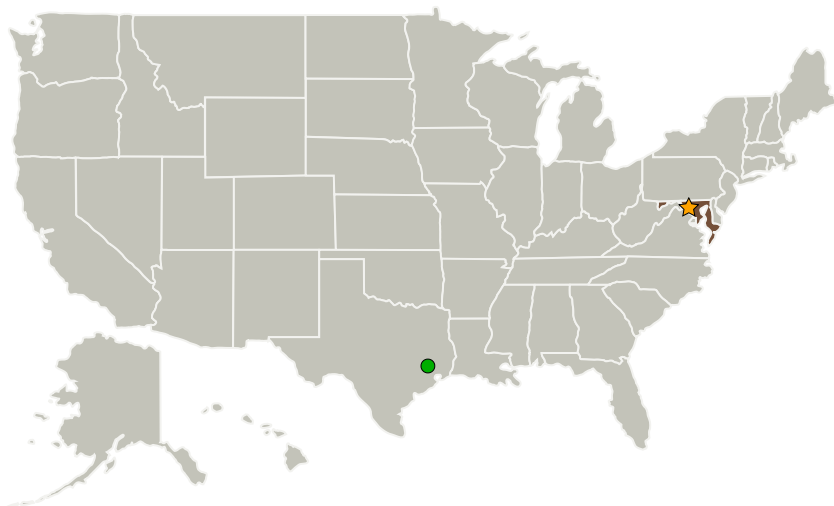
The Lobster-Eye X-Ray Transient Detector leverages cutting-edge science detectors to improve human spaceflight on ISS and Astrophysics applications. The unique features of the Lobster X-Ray detector are the large Field of View (FOV), high sensitivity and high localization focused X-Rays. The impact of the technology will enable both ISS world-class science and astronaut safety.

Lobster X-Ray Imaging technology gives high sensitivity and source localization. The project consist of the following: Demonstrate angular resolution and sensitivity. Successful lab demonstration of ISS leak checking, using nitrogen, electron beam, and Lobster x-ray optic.

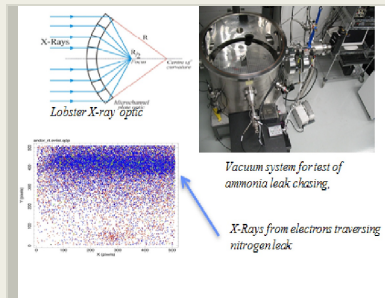
## Anticipated Benefits

Direct detection of Black Hole X-Rays, gravitational wave coincidence studies are performed by using the Lobster detector in astrophysics mode.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Goddard Space Flight Center(GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland
●Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas



ISS Leak Detection and Astrophysics with Lobster-Eye X-Ray Detector

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# ISS Leak Detection and Astrophysics with Lobster-Eye X-Ray Detector

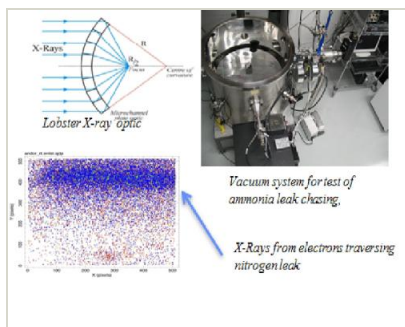
Completed Technology Project (2010 - 2014)



## Primary U.S. Work Locations

Maryland

## Images



43.jpg

ISS Leak Detection and  
Astrophysics with Lobster-Eye X-  
Ray Detector  
(<https://techport.nasa.gov/image/1266>)

## Project Website:

<http://sciences.gsfc.nasa.gov/sed/>

## Organizational Responsibility

### Responsible Mission Directorate:

Mission Support Directorate  
(MSD)

### Lead Center / Facility:

Goddard Space Flight Center  
(GSFC)

### Responsible Program:

Center Independent Research &  
Development: GSFC IRAD

## Project Management

### Program Manager:

Peter M Hughes

### Project Manager:

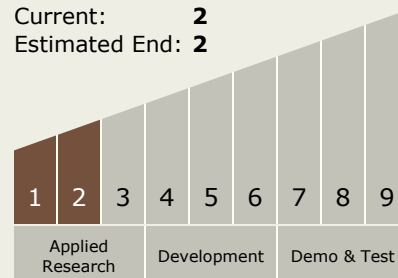
Stanley D Hunter

### Principal Investigator:

Jordan B Camp

## Technology Maturity (TRL)

Start: **1**  
Current: **2**  
Estimated End: **2**





## Technology Areas

### Primary:

- TX08 Sensors and Instruments
  - └ TX08.1 Remote Sensing Instruments/Sensors
    - └ TX08.1.1 Detectors and Focal Planes